

Center for Value Added Seed Technology

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Background

Established in 1991 to produce value-added crops using forefront plant biotechnologies and conventional plant breeding.

<u>FY94-95 Overview</u>		<u>Cumulative Overview</u>	
Current		Cumulative	
1994-95 Award	\$70,000	Awards	\$280,000
Matching Funds	\$175,470	Matching Funds	\$613,454
Patents Pending	1	Patents Issued	0
Patents Issued	0	License Agreements	0
License Agreements	0	Spin-off Companies	0
Spin-off Companies	0		
Companies Assisted	0		
Industry Jobs Created	0		
Center Jobs Created	13		

Technologies

- Conventional plant breeding of exotic wheatgrass forage and turf plants collected worldwide.
- Turf grasses for roadways, lawns, golf course, and parks, for which watering requirements are only 30% to 40% of currently-used turf grass varieties.
- Forage grasses with superior yield under arid-land conditions.
- Competitively-priced wheat and rice varieties that have the high yields of expensive hybrid varieties.
- Procedures to mass clone superior crop and forestry plants and to genetically engineer cereals, cotton, and other crops.

Center Highlights

- **Conventional plant breeding:** Selected lines of crested wheatgrass were combined and breeder seed has been produced. Studies through Utah are being conducted to determine optimum irrigation, cutting height, and fertility levels. An improved forage grass will be released this year.
- **Molecular genetic marker technology:** Produced through plant breeding an interspecific population of wild Australian wheatgrass.
- **Plant tissue culture:** These show promise for use in the mass cloning and genetic engineering of agronomic, horticultural, and forestry plants.
- Turf and forage grass cultivars released by CFAST will be protected by the Plant Variety Protection Act. Several companies have expressed interest.
- CFAST is collaborating with federal and private labs to develop bioreactors for the cloning of crops and forestry trees and to improve genetic engineering procedures.